Sheet	1	of	3	
OHIOUL		U	_3	

Form PTO-	1449	C	ЮМ	MI	ER	CE	PA	ENT OF TENT AND OFFICE	ATTY DOCKET NO. 1335.00007	SERIAL NO 08/949,213	•		
								SURE CANT	APPLICANT: Herbert M. Reynolds et al.				
317	411		SIA I	D		.Pr	LIC	ANI	FILING DATE October 10, 1997	GROUP 3108			
								U.	S. PATENT DOCUMENTS				
Examiner Initial	D	ocu	mer	nt N	10.	,	, _	Date	Name	Class	Sub- Class	Filing	Date
	L		Ц				L						
	$oldsymbol{\perp}$		Ц			L							
	$oxed{oxed}$		Ц										
				_									
	\perp												
	igspace			_	_								
										_	<u> </u>		
	τ						_	FORE	CIGN PATENT DOCUMENTS				
	D	ocu	men	t N	lo.			Date	Country	Class	Sub-	Trans	l.
	 										Class	Yes	No
	\vdash		\dashv	4	\dashv								
			\perp	4	4								
 	Н		4	_	_	\Box							
<u> </u>	Ш											<u> </u>	
	<u> </u>								(Incl. Author, Title, Date, Perti	<u>_</u>			
		Kinetic Computer-Modeling-of Human Posture in Automotive Seats, by David-F. Ekern-et-al., Copyright-1997											
	Society of Automotive-Engineers, Inc., Pages-125-through 133 (97.0592)												
entron (grandly	Biomechanically Articulated Chair Concept and Prototypes; by Robert-Hubbard and Christopher Gedraitis;												
<i>:</i>	Copyright 1997-Society of Automotive-Engineers, Inc., Pages-1-17-through-1-24-(970591).												
Examiner			A							1-22-04			
Examiner: Ir if not in conf	iitia orm	l if anc	refei e an	ren d n	ces ot (con	nsid side	dered, whether o ered. Include o	or not citation is in conformance woopy of this form with next commun	ith MPEP 609. Dr nication to applicar	aw line thro nt.	ugh cita	tion

ا کرامرہ ک ک

Sheet	2	of	3	
211001		V.		

Form PTO-	1449	C	ON	ИΜ	ER	CE	PA	ENT OF TENT AND OFFICE	ATTY DOCKET NO. 1335.00007 SERIAL NO. 08/949,213				
								SURE	APPLICANT: Herbert M. Reynolds et al.				
31	A 1 E		SIN	. Б	1 6	APP	LIC	ZANI	FILING DATE October 10, 1997	GROUP 3108			
								U.:	S. PATENT DOCUMENTS				
Examiner Initial	ם	ocu	me	nt ì	No.	,	,	Date	Name	Class	Sub- Class	Filing	Date
	<u> </u>	L	L	_			L						
···-		L	L										
	<u> </u>		_	L	_								
	igspace	L	_	L	_	_	_						
	<u> </u>	_		_	_	_	_				<u> </u>	<u> </u>	
	_	_	_	_	_	_	_				<u> </u>		
	-	_	-	-	_	_	-				ļ	<u> </u>	
							_			-	<u> </u>	ļ	
											ļ	ļ	
		\vdash	-			_	_					ļ	
	<u> </u>				L	<u></u>	<u> </u>	FORE	IGN PATENT DOCUMENTS		<u> </u>	<u> </u>	•
	D	ocu	me	nt N	No.			Date	Country	Class	Sub-	Trans	·
								24.0	Country	Class	Class	Yes	No.
											<u> </u>		
												 	
											 	İ	
					01	H	ER	DOCUMENTS	(Incl. Author, Title, Date, Per	rtinent Pages, etc.)	- !		<u> </u>
	Đ	Development of Human Back Contours for Automobile Seat Design, by Barry L. Frost, III et al., Copyright 1997											
		Society of Automotive Engineers, Inc., Pages 107 through 1-15 (970590).											
		Measuring-and-Modeling-of-Human-Soft-Tissue-and-Seat-Interaction, by Richard-HSetyabudhy-et-al.,											
·		Copyright-1997 Society of Automotive Engineers, Inc., Pages-135-through 142 (970593).											
Examiner		R /	۱ و	V	i)				Date Considered	7-22-04	f		
Examiner: I	ner: Initial if references considered, whether or not citation is in conformance with MPEP 609. Draw line through citation												

if not in conformance and not considered. Include copy of this form with next communication to applicant.

~0 (0 ME)

	Sheet	. 3	of	3	
--	-------	-----	----	---	--

Form PTO-	1449	C	OM	M	ER	CE	PA	ENT OF TENT AND FFICE	ATTY DOCKET NO. 1335.00007		SERIAL NO. 08/949,213			
								SURE CANT	APPLICANT: Herbert M. Reynolds et al.					
317	711	21411	214.1	D			LIC		FILING DATE October 10, 1997 GROUP 3108					
								U.:	S. PATENT DOCUMENTS					
Examiner Initial	D	ocu	men	at N	No.			Date	Name		Class	Sub- Class	Filing	Date
				_		L								
								· · · · · · · · · · · · · · · · · · ·						
	L		\perp	_	_									•
··· —· · · · · · · · · · · · · · · · ·	L		4	_										
	L													
	 													
			\dashv											
-								FORE	IGN PATENT DOCUMEN	ITS				
	D	ocu	men	t N	lo.			Date	Country		Class	Transi.		
	-			_								Class	Yes	No
	_		_	\dashv	_									
	_	_	\dashv	1	_									
			4	_	_									
				_										
	Γ.				_				(Incl. Author, Title, Date, I					
	Progress with Human Factors in Automotive Design: Seating Comfort; Visibility, and Safety, Published by													
	Society of Automotive Engineers, Inc., February 1997.													
Examiner	RAEVI) Date Considered 7-22-04													
Examiner: Ir	nitia orm	l if	refe	ren	ces	CO	nsio side	dered, whether cered. Include co	or not citation is in conforman	nce with M	PEP 609. Drav	v line thro	ugh cita	ation

\$3,

Sheet	1	_	•	2	
Succi	I	0	I	4	

Form PTO-14	form PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE								ATTY DOCKET NO.	SERIAL NO.			
									1335.00007	08/949,213			
								SURE	APPLICANT: Herbert M. Reynolds et al.				
STA	TE	ME	NT	B	ΥA	PP)	LIC	ANT	FILING DATE GROUP October 10, 1997				
								U.S	S. PATENT DOCUMENTS				
Examiner Initial	D	ocu	me	nt N	Vo.	_	_	Date	Name	Class	Sub- Class	Filing	Date
n	3	1	4	7	6	1	7	09/08/64	Kaptur, Jr. et al.	73	172	02/06/	61
pe	3	7	7	8	1	0	4	12/11/73	Kusters	297	458	04/21/	71
PU	4	0	2	6	0	4	1	05/31/77	Kennedy	35	26	04/28/	76
RL	4	2	4	2	8	0	2	01/06/81	Jenner et al.	33	174	05/17/	79
RL	4	5	7	8	8	7	5	04/01/86	Vertin	33	562	10/17/	83
m	4	6	8	8	8	5	3	08/25/87	Watts	297	459	01/30/	86
ph	4	7	2	8	1	5	Ö	03/01/88	Gaudreau, Jr.	297	383	10/08/	86
Re	4	9	9	3	1	6	4	02/19/91	Jacobsen	33	561.3	07/05/	90
pl	4	9	9	8	3	5	4	03/12/91	Silverman et al.	33	514.2	06/20/	90
PL 5 0 1 8 7 9 0 05/28/91						9	0	05/28/91	Jay	297	458	03/12/	90
R	RU 5 0 5 8 2 8 5 10/22/91 Morita et al. 33 563 · 07/18/90									90			
								FORE	EIGN PATENT DOCUMENTS				
	D	ocu	me	nt l	No.			Date	Country	Class	Sub-	Transl	•
		_									Class	Yes	No
	L				L	L	L						
	_						L						
	L	_	_										
	_		L										
	,				O7	ГН	ER	DOCUMENT	S (Incl. Author, Title, Date, Pertiner	t Pages, etc.)			
Examiner	Ģ	24	٠٤	<u>U</u> 1	<u>()</u>				Date Considered 7-22.	-04			
									or not citation is in conformance with copy of this form with next communic			ough cit	ation

Form PTO-1	449								ATTY DOCKET NO.	SERIAL NO.			
								FENT AND	1335.00007	08/949,213			
								SURE	APPLICANT: Herbert M. Reynolds et al.				-
STA	TE	ME	NT	В	Υ A	PP	LIC	ANT	FILING DATE October 10, 1997	GROUP			
								U.	S. PATENT DOCUMENTS		_		
Examiner Initial	D	ocu	mei	nt N	ło.			Date	Name	Class	Sub- Class	Filing	Date
pr	5	0	6	0	3	9	3	10/29/91	Silverman et al.	33	512	03/11/	91
pr	5	1	9	3	2	8	5	03/16/93	Heinrich et al.	33	514.2	08/01/	91
pr	5	2	3	5	9	8	8	08/17/93	Johnson et al.	128	774	07/15/	91
PL	5	3	7	5	6	1	0	12/27/94	LaCourse et al.	128	782	04/28/	92
													_
								,					
								FORE	EIGN PATENT DOCUMENTS				
	D	ocu	me	nt ì	10.			Date	Country	Class	Sub-	Transl	•
											Class	Yes	No
												,	
												<u></u>	<u> </u>
			Ī		01	CHD	ER	DOCUMENTS	S (Incl. Author, Title, Date, Pertiner	nt Pages, etc.)			
												-	
										_			
Examiner		R	Αi	لہ	1))			Date Considered 7-2	2-04			
Examiner: I	nitia	ıl if	ref	ere	nce	s c	ons	dered, whether	or not citation is in conformance with	MPEP 609. Dra	w line thro	ough cita	ation

if not in conformance and not considered. Include copy of this form with next communication to applicant.

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute	e for form 1449A/PTO		Complete If Known				
INIEG	DRAKTION		Application Number	08/949,213			
		DISCLOSURE	Filing Date	October 10, 1997			
STA	TEMENT BY	APPLICANT	First Named Inventor	Herbert M. Reynolds et al.			
			Group Art Unit	2856			
	(use as many she	ets as necessary)	Examiner Name	R. Raevis			
Sheet	1	of 2	Attorney Docket Number	1335-00007 (60,598-001)			

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Τ²
P	1	Devices for Use in Defining and Measuring Vehicle Seating Accomodation - SAE J826 April 1980	
RP_	2	Spatial Geometry of the Human Pelvis, by H.M. Reynolds, C.C. Snow, J.W. Young, Civil Aeromedical Institute, March 1982	
pr	3	Geometric Model and Spinal Motions of the Average Male in Seated Postures, by W. Haas, Thesis, March/April 1990	
RL	4	The Use of Electromyography for Seat Assessment and Comfort Evaluation, by T. Bush, F.T. Mills, K. Thakurta, R.P. Hubbard and J. Vorro, International Congress and Exposition, February 1995 (950143)	
RP	5	Selected Design Parameters for Relining Seats Based on Engineering Anthropometry; M.M. Ayoub, S. Deivanayagam; Department of Industrial Engineering Texas Tech University, Lubbock, Texas; September 1977	
RE	6	An Investigation of Driver Discomfort and Related Seat Design Factors in Extended Duration Driving; Matthew P. Reed, Masatsugo Saito and Yasuo Kakishima, Nahm S. Lee & Lawrence W. Schneider; International Congress and Exposition, Detroit, MI Feb 25- March 1, 1991	
RR	7	Lumbar Support in Auto Seats: Conclusions from a Study of Preferred Driving Posture; Matthew P. Reed and Lawrence W. Schneider International Congress & Exposition, Detroit, MI February 26-29, 1996	
RL	8	A Kinematic Model of the Human Spine and Torso, Gary Monheit and Norman I. Badler; University of Penn	
pl	9	Some Effects of Lumbar Support Contour on Driver Seated Posture; Matthew P. Reed, Lawrence W. Schneider and Bethany A. H. Eby, University of Michigan	
RR_	10	Distribution of Automobile Trip Durations for Studies of Seat Comfort; Matthew P. Reed and Dawn L. Massie; University of Mich.; International Congress and Exposition, Detroit, MI Feb 26-29, 1996	
	11	Spinal-Curvature-of-Young-Adult-Females; Herbert M. Reynolds; James JRechtlen; Grayson-WMarshall-and————Sally-Marshall-————	

- 4				
1	Examiner Signature	RAWIS	Date Considered	7-22-04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the Individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



¹ Unique citation designation number. 2 Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+)	inside this box	+
-----------------------------	-----------------	---

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitut	e for form 1449A/PTO			Complete if Known		
INIEC	DMATION		OLOCUPE	Application Number	08/949,213	
INFORMATION DISCLOSURE				Filing Date	October 10, 1997	
STATEMENT BY APPLICANT			PPLICANT	First Named Inventor	Herbert M. Reynolds et al.	
				Group Art Unit	2856	
(use as many sheets as necessary)			necessary)	Examiner Name	R. Raevis	
Sheet	2	of	2	Attorney Docket Number	1335.00007 (60,598-001)	

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
RR	12	Anatomical Frames of Reference and Biomechanics; Herbert M. Reynolds and Robert P. Hubbard; Department of Biomechanics, Michigan State University Human Factors, 1980 22(2) 171-176	
RR	13	The Influence of Backrest Inclination and Lumbar Support of Lumbar Lordosis; G.B.J. Anderson, MD, PhD; R.W. Murphy, MD, R. Ortengren, PHD; and A.L. Nachemson, MD, PhD.; Spine Volume 4, Number 1 January/February 1979	
pr_	14	Lumbar Disc Pressure and Mycelectric Back Muscle Activity During Sitting; IV Studies on a Car Driver's Seat; R.J. G. Anderson, R. Ortengren, A Nachemson and G. Elfstrom; Scand J. Rehab Med 6:128-133, 1974	
RL	15	A Design Layout and Method for Relating Seating to the Occupant and Vehicle; F.W. Babbs; T.I. Cox; Ergonomics, 1979, Vol 22 No 2,227-234	
	16-	The Driving Seat. Its Adaptation to Eucctional and Anthropometric Requirement. Royal Aircraft Establishment.	
RR	17	Erect, Neutral and Slump Sitting Postures; A Study of the Torso Linkage System from Shoulder to Hip Joint; Herbert M. Reynolds; October 1994	

	Examiner Signature	RAGULY	Date Considered	7-22-04
--	-----------------------	--------	--------------------	---------

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.